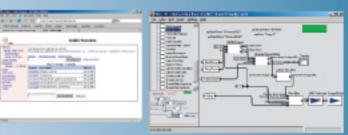
Future Mission Environment: Virtualizing Access to Solar Physics Data



- Single group at Lockheed-Martin
- Funded by NASA LWS TR&T; second phase funding through 2007
- Extensible to other areas of Sun-Earth research



- Allows users to layer data access, identification, and processing to reduce actual data transfers
- Able to access EGSO, VSO



European Grid of Solar Observations





- · European, US consortium
- EU groups EC funded; initial funding through mid-2005
- Solar feature, event catalogs as well as data service catalog
- Can provide processing services as well as data services



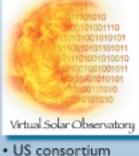
- Tiered servers (catalogs, data,
- processingservices) Able to access VSO

Observatory Association



- Worldwide membership.,
- Includes NVO, AstroGrid
- Concentrates on standards, interoperability

Current solar physics efforts



Virtual Solar Observatory

- NASA funded; initial
- funding through mid-2005
- · Most space-, groundbased solar physics data
- · Currently limited to identifying multiple data sources and delivering data



- Will serve STEREO, Solar-B, SDO data
- Techology is based on SOAP
- No central server: truly virtual





- Single group at NASA Goddard
- Funded by NASA LWS TR&T through 2007
- Uses SPASE dictionary of space physics metadata definitions
- Provides list of URL's as well as virtualizing access

The undiscovered country

Semantic Web Activity



- Subject of active World-Wide Web Consortium (W3C) activity
- What Tim Berners-Lee is doing now
- Seeks to provide access to all public databases connected to the Web but invisible through HTML
- Could potentially provide broad, public access toscientific databases amassed with public funds

Bridging efforts to other space physics fields

US National Virtual Observatory

US National Virtual Observatory

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